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10/506,751	09/03/2004	Katsuya Yamamoto	09792486-0154	6582

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EXAMINER

BALAOING, ARIEL A

ART UNIT

PAPER NUMBER

2683

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/506,751

Applicant(s)

YAMAMOTO, KATSUYA

Examiner

Ariel Balaoing

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 09/14/2005 have been fully considered but they are not persuasive.
2. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. Claim 14 is objected to because of the following informalities: the limitation "A radio communication *method*" is recited on line 1 of the claim. This should read "A radio communication *unit*". Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 1, 5, 7, and 11 rejected under 35 U.S.C. 103(a) as being unpatentable over IMATSUKA (JP 2002095051) in view of SCHREIER (US 6,275,480 B1).

Regarding claims 1, IMATSUKA discloses a radio communication method in a phone having a first part operatively configured to effect a first bidirectional radio communication [cellular phone function] with a predetermined station and a second part operatively configured to effect a second bidirectional radio communication [short range radio communication function] with a reader/writer when the phone is positioned adjacent to the reader writer, (42-Figure 5) (abstract; paragraph 13), the method

comprising: detecting, via the second part of the phone, as signal transmitted by the reader/writer to start the second radio communication with the reader/writer (paragraph 7-10; a short-distance radiocommunication function is initiated when the portable telephone is positioned in proximity of the ticket gate); and in response to detecting the signal transmitted by the reader/writer to start the second radio communication with said reader/writer (paragraph 2, 7-10; Bluetooth communication is initiated), temporarily stopping output of transmission data in the first radio communication with said predetermined station (paragraph 7-10; paragraphs 39-53; the call in progress is temporarily interrupted in order to perform gate processing. As pointed out by the applicant, the station and time codes are sent to the partner of the call before the interruption occurs). However, IMATSUKA does not expressly disclose wherein the temporary stop is such that the second radio communication is inhibited from causing interference in the first radio communication. SCHREIER discloses wherein the temporary stop is such that the second radio communication is inhibited from causing interference in the first radio communication (col. 6, line 29-col. 7, line 49). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify IMATSUKA to include temporarily stopping communication from a second signal from causing interference with first signal, as taught by SCHREIER, as this allows IMATSUKA to provide fewer errors to the first communication control signal.

Regarding claim 5, see the rejections of the parent claim concerning the subject matter this claim is dependant upon. IMATSUKA further discloses further comprising: detecting, via the second part of the phone, the completion of said second radio

communication (paragraphs 7-14, 60-69); and when completion of said second radio communication is detected, permitting the outputting of the transmission data is released (paragraphs 60-69).

Regarding claim 7, IMATSUKA further discloses a radio communication unit comprising: a first radio communication processor operatively configured to generate a first bidirectional radio communication [cellular phone function] with a predetermined station (paragraphs 11-39, 39-53), a second radio communication processor operatively configured to generate a second bidirectional radio communication [short range radio communication function; SF card] with an adjacent reader/writer (42-Figure 5) (abstract; paragraph 2, 11-39), and a controller operatively configured to detect a signal transmitted by the reader/writer for starting the second radio communication with the reader/writer and to temporarily stop output of transmission data in said first radio communication processor (paragraphs 11-39, 39-53). However, IMATSUKA does not expressly disclose wherein the temporary stop is such that the second radio communication is inhibited from causing interference in the first radio communication. SCHREIER discloses wherein the temporary stop is such that the second radio communication is inhibited from causing interference in the first radio communication (col. 6, line 29-col. 7, line 49). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify IMATSUKA to include temporarily stopping communication from a second signal from causing interference with first signal, as taught by SCHREIER, as this allows IMATSUKA to provide fewer errors to the first communication control signal.

Regarding claim 11, see the rejections of the parent claim concerning the subject matter this claim is dependant upon. IMATSUKA further discloses wherein said controller is operatively configured to detect the completion of said second radio communication and to release the processing to temporarily stop outputting the transmission data in said first radio communication processor, when completion of the radio communication in said second radio communication processor is detected (paragraphs 11-39, 38-53).

6. Claims 2, 3, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over IMATSUKA (JP 2002095051) in view of SCHREIER (US 6,275,480 B1), and in further view of SEPPANEN (US 6,330,442 B1).

Regarding claims 2 and 3, see the rejections of the parent claim concerning the subject matter these claims are dependant upon. IMATSUKA further discloses the step of temporarily stopping output of transmission data comprises inputting of transmission data (paragraphs 6, 11-39, 62, and 63; phone call is interrupted when short range transmission is detected), and, even when no data is stored, transmitting packets having control data associated with said first bidirectional radio communication (paragraphs 6, 11-39, 62, and 63; call is placed on hold, hence no data is stored and a control channel is left open between the portable device and the called party). However IMATSUKA in view of SCHREIER does not disclose wherein the data is stored in a buffer. SEPPANEN discloses wherein transmission data is stored in a buffer (column 14:lines 37-48). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify IMATSUKA in view of SCHREIER

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to include a storage buffer for transmission data as taught by SEPPANEN as both systems disclose signal transmissions from a portable device. This is beneficial in that it allows the mobile device to control the transmission rate of outgoing data.

Regarding claims 8 and 9, see the rejections of the parent claim concerning the subject matter these claims are dependant upon. IMATSUKA further discloses wherein the controller stops the output of transmission data by temporarily inhibiting the input of the transmission data (paragraphs 6, 11-39, 62, and 63; phone call is interrupted when short range transmission is detected) while permitting the transmission of packets having control data associated with said first bidirectional radio communication, even when no data is stored (paragraphs 6, 11-39, 62, and 63; call is placed on hold, hence no data is stored and a transmission channel is left open). However IMATSUKA in view of SCHREIER does not expressly disclose wherein the data used by the first radio communication processor to temporarily store the data for output is stored in a buffer. SEPPANEN discloses wherein the data used by the first radio communication processor to temporarily store the data for output is stored in a buffer (column 14:lines 37-48). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify IMATSUKA in view of SCHREIER to include a storage buffer for transmission data as taught by SEPPANEN as both systems disclose signal transmissions from a portable device. This is beneficial in that it allows the mobile device to control the transmission rate of outgoing data.

7. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over IMATSUKA (JP 2002095051) in view of SCHREIER (US 6,275,480 B1) and as applied

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to claims 1 and 7 above, and further in view of and SEPPANEN (US 6,330,442 B1) and HARRIS et al (US 6,400,755 B1).

Regarding claim 4, IMATSUKA further discloses wherein the step of temporarily stopping output of transmission data comprises stopping the inputting of transmission data (paragraphs 6, 11-39, 62, and 63; phone call is interrupted when short range transmission is detected); and even when no data is stored, transmitting packets having control data associated with said first bidirectional radio communication (paragraphs 6, 11-39, 62, and 63; call is placed on hold, hence no data is stored and a control channel is left open). However IMATSUKA in view of SCHREIER does not disclose wherein the data is stored in a buffer. SEPPANEN discloses wherein transmission data is stored in a buffer (column 14:lines 37-48). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify IMATSUKA in view of SCHREIER to include a storage buffer for transmission data as taught by SEPPANEN as both systems disclose signal transmissions from a portable device. This is beneficial in that it allows the mobile device to control the transmission rate of outgoing data. However, the combination of IMATSUKA, SCHREIER and SEPPANEN do not disclose wherein the packets transmitted when no data is stored in said buffer are transmitted at the lowest transmission rate. HARRIS discloses wherein the packets transmitted when no data is stored in said buffer are transmitted at the lowest transmission rate (abstract, column 4:lines 32-44). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of IMATSUKA, SCHREIER and SEPPANEN to transmit packets

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at the lowest rate when no data is being sent as taught by HARRIS since both systems disclose data transmission from a mobile device. This is beneficial in that it allows the preservation of battery power by using lowered transmission power when there is no data present.

Regarding claim 10, see the rejections of the parent claim concerning the subject matter this claim is dependant upon. IMATSUKA further discloses wherein the temporary stop made by said controller is the processing to stop inputting transmission data that is provided with said first radio communication processor and that stores the controller stops the output of transmission data by temporarily inhibiting the input of the transmission data (paragraphs 6, 11-39, 62, and 63; phone call is interrupted when short range transmission is detected) while permitting the transmission of packets having control data associated with said first bidirectional radio communication, even when no data is stored (paragraphs 6, 11-39, 62, and 63; call is placed on hold, hence no data is stored and a transmission channel is left open). However IMATSUKA in view of SCHREIER does not disclose wherein the data is stored in a buffer. SEPPANEN discloses wherein transmission data is stored in a buffer (column 14:lines 37-48). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify IMATSUKA in view of SCHREIER to include a storage buffer for transmission data as taught by SEPPANEN as both systems disclose signal transmissions from a portable device. This is beneficial in that it allows the mobile device to control the transmission rate of outgoing data. However, the combination of IMATSUKA, SCHREIER and SEPPANEN do not disclose wherein the

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packets transmitted in said state of - having no data are transmitted at the lowest transmission rate. HARRIS discloses wherein the packets transmitted in said state of - having no data are transmitted at the lowest transmission rate (abstract, column 4:lines 32-44). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of IMATSUKA, SCHREIER and SEPPANEN to transmit packets at the lowest rate when no data is being sent as taught by HARRIS since both systems disclose data transmission from a mobile device. This is beneficial in that it allows the preservation of battery power by using lowered transmission power when there is no data present.

8. Claims 6 and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over IMATSUKA (JP 2002095051) in view of SCHREIER (US 6,275,480 B1), further in view of VEGA et al (US 6,282,407 B1).

Regarding claims 6 and 12, see the rejections of the parent claims concerning the subject matter these claims are dependant upon. However the combination of IMATSUKA in view of SCHREIER does not disclose wherein the signal transmitted by the reader/writer to start the second radio communication is an electric power wave, and said second radio communication operates under power obtained by receiving electric power wave supplied from said reader/writer. VEGA discloses wherein the signal transmitted by the reader/writer to start the second radio communication is an electric power wave, and said second radio communication operates under power obtained by receiving electric power wave supplied from said reader/writer (column 2:lines 27-40). Therefore it would have been obvious to a person of ordinary skill in the art at the time

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the invention was made to modify IMATSUKA in view of SCHREIER to include a passive powering means as taught by VEGA since both systems relate to using a short ranged interrogation/response communication system. This is beneficial in that no power is needed to operate the secondary transmission system when in range of the interrogator.

9. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over IMATSUKA (JP 2002095051) in view of SCHREIER (US 6,275,480 B1) and SEPPANEN (US 6,330,442 B1) as applied to claims 2 and 8 above, and further in view of GALLAGHER et al (US 2004/0116120 A1).

Regarding claim 13, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. However, the combination of IMATSUKA, SCHREIER, and SEPPANEN does not expressly disclose wherein the first part of the phone includes a software-hierarchy communication model having a data-link layer operatively configured to manage transmission data congestion when in a first mode and the step of temporarily stopping output of transmission data further comprises temporarily forcing the data-link layer into the first mode. GALLAGHER discloses wherein the first part of the phone includes a software-hierarchy communication model having a data-link layer operatively configured to manage transmission data congestion when in a first mode and the step of temporarily stopping output of transmission data further comprises temporarily forcing the data-link layer into the first mode (paragraph 51). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of IMATSUKA, SCHREIER, and

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SEPPANEN to include a software communication model having a data-link layer to manage transmission data, as taught by GALLAGHER, as the data link layer is a well known standard used in managing transmission protocols of data communication.

Regarding claim 14, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. However, the combination of IMATSUKA, SCHREIER, and SEPPANEN does not expressly disclose further comprising a software-hierarchy communication model run by the radio communication processor, the communication model having a data-link layer operatively configured to manage transmission data congestion when in a first mode, wherein the step of temporarily stopping output of transmission data further comprises temporarily forcing the data-link layer into the first mode (paragraph 51). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of IMATSUKA, SCHREIER, and SEPPANEN to include a software communication model having a data-link layer to manage transmission data, as taught by GALLAGHER, as the data link layer is a well known standard used in managing transmission protocols of data communication.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ariel Balaoing whose telephone number is (571) 272-7317. The examiner can normally be reached on Monday-Friday from 8:00 AM to 4:30 AM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ariel Balaoing
Art Unit 2683
Patent Examiner

AB

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